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DDHD1 Rabbit pAb

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Catalog # AP55468

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q8NEL9
Predicted	Rat, Pig, Dog, Human, Mouse, Rabbit, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	100435
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human DDHD1
Epitope Specificity	751-850/900
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasmic
DISEASE	Spastic paraplegia 28, autosomal recessive (SPG28) [MIM:609340]: A form of spastic paraplegia, a neurodegenerative disorder characterized by a slow, gradual, progressive weakness and spasticity of the lower limbs. Rate of progression and the severity of symptoms are quite variable. Initial symptoms may include difficulty with balance, weakness and stiffness in the legs, muscle spasms, and dragging the toes when walking. In some forms of the disorder, bladder symptoms (such as incontinence) may appear, or the weakness and stiffness may spread to other parts of the body. Some SPG28 patients also have distal sensory impairment. Note=The disease is caused by mutations affecting the gene represented in this entry.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Phosphatidic acid is released following cell activation and functions as a second messenger in several signaling pathways. DDHD1 is a lipase that catalyzes degradation of phosphatidic acid and attenuates cell activation.

Additional Information

Gene ID	80821
Other Names	Phospholipase DDHD1, 3.1.1.111, 3.1.1.32, DDHD domain-containing protein 1, Phosphatidic acid-preferring phospholipase A1 homolog, PA-PLA1, 3.1.1.118, Phospholipid sn-1 acylhydrolase, DDHD1 (HGNC:19714), KIAA1705
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	DDHD1 (HGNC:19714)
Synonyms	KIAA1705
Function	Phospholipase A1 (PLA1) that hydrolyzes ester bonds at the sn-1 position of glycerophospholipids producing a free fatty acid and a lysophospholipid (Probable) (PubMed:20359546, PubMed:22922100). Prefers phosphatidate (1,2-diacyl-sn-glycero-3-phosphate, PA) as substrate in vitro, but can efficiently hydrolyze phosphatidylinositol (1,2-diacyl-sn-glycero-3-phospho-(1D-myo-inositol), PI), as well as a range of other glycerophospholipid substrates such as phosphatidylcholine (1,2-diacyl-sn-glycero-3-phosphocholine, PC), phosphatidylethanolamine (1,2-diacyl-sn-glycero-3-phosphoethanolamine, PE), phosphatidylserine (1,2-diacyl-sn-glycero-3-phospho-L-serine, PS) and phosphatidylglycerol (1,2-diacyl-sn-glycero-3-phospho-(1'-sn-glycerol), PG) (Probable) (PubMed:20359546). Involved in the regulation of the endogenous content of polyunsaturated PI and PS lipids in the nervous system. Changes in these lipids extend to downstream metabolic products like PI phosphates PIP and PIP2, which play fundamental roles in cell biology (By similarity). Regulates mitochondrial morphology (PubMed:24599962). These dynamic changes may be due to PA hydrolysis at the mitochondrial surface (PubMed:24599962). May play a regulatory role in spermatogenesis or sperm function (PubMed:24599962).
Cellular Location	Cytoplasm.
Tissue Location	Highly expressed in testis. Also expressed in brain, spleen and lung. Only expressed in cerebellum in fetal brain

Background

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Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.